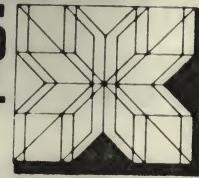


Mr. 2-12-81

**ANDROMEDA  
SYSTEMS  
INC.**



DAC11  
DIGITAL TO ANALOG  
CONVERTER

LSI-11™ COMPATIBLE

## FEATURES

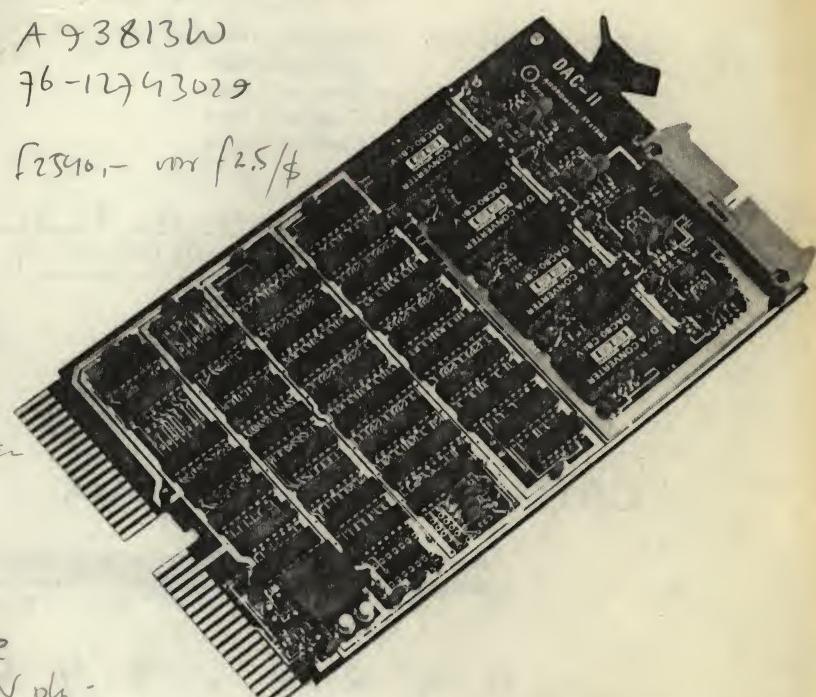
- FUNCTIONAL SUPERSET OF DEC™ AAV11-A
- UP TO 4 D/A CHANNELS
- 12 BIT RESOLUTION
- USES STANDARD VOLTAGES (+5, +12)
- 16 DIGITAL CONTROL OUTPUTS
- 4 ADJUSTABLE PULSE OUTPUTS
- FAST SETTLING:  $\leq 3$  MICROSECONDS
- REMOTE COMMON MODE SENSING ON EACH CHANNEL
- PLUGS INTO LSI-11 BACKPLANE (DUAL WIDTH)

Besteld 9-dec paletex

A 93813W

76-12743029

£2540,- voor £25/\$



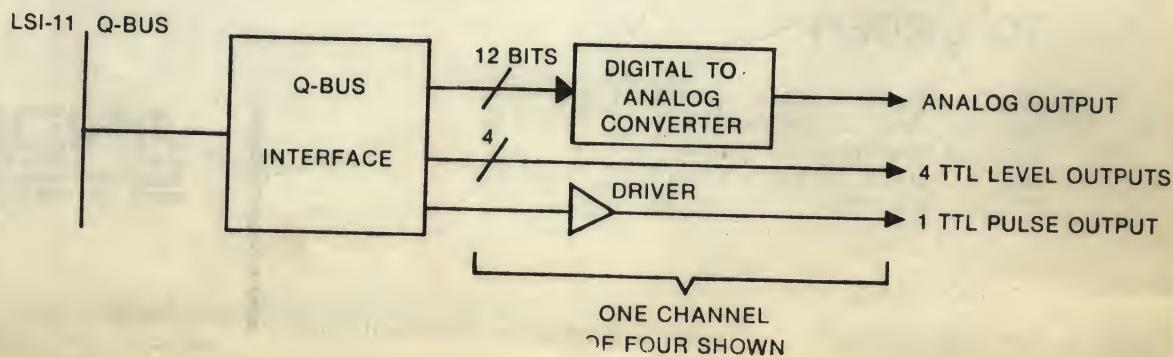
## DESCRIPTION

The DAC11 is a 4 channel/12 bit digital to analog converter on a dual-width, Q-bus compatible card. Included on the card is a DC/DC converter to generate  $\pm 15$  volts for the analog circuitry. Each channel has user selectable output voltage ranges of  $\pm 2.5V$ ,  $\pm 5V$ ,  $\pm 10V$ , 0 to  $+5V$ , and 0 to  $+10V$ . Additionally, the complement of each analog output is available on the card. Setting time to 0.01% of full scale is  $\leq 3\mu s$  for a 10 volt step change.

Each analog output has remote sensing of the load ground potential. This allows ground potential differences between the computer and load to be rejected, assuring 12 bit accuracy at the end of long cables.

Each data channel has 4 TTL compatible outputs for user control functions. These outputs are controlled by the 4 most significant bits of each of the four data registers. Four adjustable one-shots, which may be triggered from a variety of sources, are included for pulse control applications. For complete AAV11-A compatibility, the four least significant bits of the channel 3 data register are also output. Each D/A converter is controlled by the least significant 12 bits of its data register.

## FUNCTIONAL BLOCK DIAGRAM



## SPECIFICATIONS

**Compatibility:** Functional superset of the DEC AAV11-A. Extra functions use unassigned bits in the CSR and unused pins on the I/O connector.

**Power Requirements:**

- .7A at +5VDC (TYP)
- .35A at +12VDC (TYP)

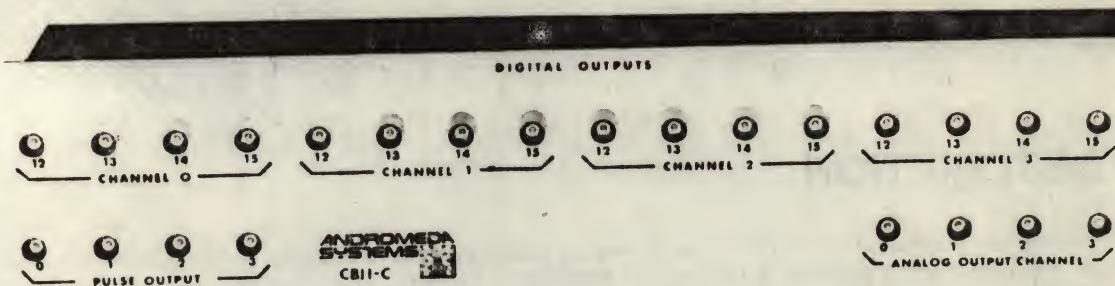
**LSI-11 Bus Interface:** 4 Registers (Read/Write):

- Channel 0 data
- Channel 1 data
- Channel 2 data
- Channel 3 data

**Data register bit assignments:**

15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
TTL Outputs								DAC Control							

## CB11-C CONNECTOR BOX



An optional termination box, the CB11-C, provides BNC connectors for the four analog outputs, the 16 digital control outputs and the four pulse outputs. The connector box is 3.5" H and may be rack mounted or free-stand. The CB11-C plugs into the I/O connector on the DAC11 with an optional cable.



CB11-C Connector Box (Back View).

## TO ORDER

DAC11: Digital to analog converter, 4 channels  
 DAC11-A: DAC11, 1 channel only  
 DAC11-B: DAC11, 2 channels only  
 DAC11-C: DAC11, 3 channels only  
 CB11-C: Connector box

**ANDROMEDA SYSTEMS INC.**

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T.M.: LSI-11 and DE

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